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| 10/824,906 | 04/15/2004 | Mitsuo Nakayama | 0524-0155 | 7607 |
| <div>7590 02/21/2008 COOK, ALEX, MCFARRON, MANZO, CUMMINGS & MEHLER, LTD. Suite 2850 200 West Adams St. Chicago, IL 60606</div> | | | <div>EXAMINER VANCHY JR, MICHAEL J</div> | |
| | | | <div>ART UNIT 2624</div> | <div>PAPER NUMBER</div> |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/824,906

Applicant(s)

NAKAYAMA, MITSUO

Examiner

Michael Vanchy Jr.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/19/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 42 is objected to because of the following informalities: The claim does not end with a period ("."). Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1, 2, 5-7, 9-13, 15-17, 19, 21-42 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Ryosuke et al., JP 2003-087544, and further in view of Hideki, JP 2002-352190.

Regarding claim 1, Ryosuke et al. (Ryosuke) states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and

calculates positional information (Abstract). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images (Abstract). It would be clear to one of ordinary skill in the art at the time of the invention to include "character recognition" into the mobile communication terminal of Ryosuke for quicker utilization of the processed information.

Regarding claim 2, Ryosuke teaches a mobile communication terminal with a scanner that can take partial images for means to carry out image composition. Therefore, at least two predetermined areas have been calculated for positional information, the partial and its composite ([0007]). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information (Abstract).

Regarding claim 5, Ryosuke teaches outputting image data of the serial static images together with the positional information to other mobile telecom terminals as well as a personal computer ([0046]). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information (Abstract).

Regarding claim 6, Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). Ryosuke also teaches the ability to output information to an external personal computer ([0046]), however, Ryosuke is silent on teaching character recognition and using the external personal computer for character recognition and joining the image. The examiner takes into account that since the terminal device in Ryosuke does join the images using positional information it would be obvious to one of ordinary skill in the art to be able to join the images on a personal computer using the

same implementation that the terminal device uses. Hideki, although, does teach sending the image data taken from the portable terminal device through a camera, to an image processing server for character recognition (Abstract).

Regarding claim 7, Ryosuke teaches the image processing terminal apparatus according to claim 6, wherein the image data of the each of serial static images of the intended area being captured with the image capture device is displayed on the display device (Abstract and [0027]). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information (Abstract).

Regarding claim 9, Hideki teaches the image processing terminal apparatus according to claim 1, wherein the apparatus is configured to function as a mobile phone and is connected with a server via a wireless public switched network (Drawing 1 and [0015]).

Regarding claim 10, Ryosuke teaches the image processing terminal apparatus according to claim 1, further comprising: an image synthesis device configured to serially join the image data of the each of serial static images of the intended area for character recognition with each other based upon the position information of the each of serial static images of the intended area for character recognition to generate image data of the intended area (Abstract). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information (Abstract).

Regarding claim 11, Hideki teaches the image processing terminal apparatus according to claim 10, further comprising: a character recognition device configured to perform character recognition to the image data of the intended area ([0010] The examiner takes into account that the character recognition device is the mobile telephone which uses the network and a server/computer to perform character

recognition. Thus, the device is still configured to perform character recognition with the server connection which is part of the device.).

Regarding claim 12, Hideki teaches, the image processing terminal apparatus according to claim 11, further comprising: a display device; and wherein a result of character recognition to the image data of the intended area is displayed on the display device ([Claim 1]).

Regarding claim 13, Ryosuke teaches the image processing terminal apparatus according to claim 10, further comprising: a display device; and wherein the image data of each of serial static images of the intended area for character recognition being captured with the image capture device is displayed on the display device (Abstract and [0027]). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information (Abstract) and displaying said information ([Claim 1]).

Regarding claim 15, Hideki teaches the image processing terminal apparatus according to claim 10, wherein the apparatus is configured to function as a mobile phone and is connected with a server via a wireless public switched network (Drawing 1 and [0015]).

Regarding claim 16, Ryosuke et al. (Ryosuke) states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). Ryosuke also teaches the ability to output information to an external personal computer ([0046]), however, Ryosuke is silent on teaching character recognition and using the external personal computer for character

recognition and joining the image. The examiner takes into account that since the terminal device in Ryosuke does join the images using positional information it would be obvious to one of ordinary skill in the art to be able to join the images on a personal computer using the same implementation that the terminal device uses. However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images (Abstract).

Regarding claim 17, Hideki teaches the system according to claim 16, wherein the computer performs character recognition to the image data of the intended area (Abstract).

Regarding claim 19, Ryosuke et al. (Ryosuke) states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). Ryosuke also teaches the ability to output information to an external personal computer ([0046]), however, Ryosuke is silent on teaching character recognition and using the external personal computer for character recognition and joining the image. The examiner takes into account that since the terminal device in Ryosuke does join the images using positional information it would be obvious to one of ordinary skill in the art to be able to join the images on a personal computer using the same implementation that the terminal device uses. However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images (Abstract).

Regarding claim 21, Ryosuke et al. (Ryosuke) states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). Ryosuke also teaches the ability to output information to an external personal computer ([0046]), however, Ryosuke is silent on teaching character recognition and using the external personal computer for character recognition and joining the image. The examiner takes into account that since the terminal device in Ryosuke does join the images using positional information it would be obvious to one of ordinary skill in the art to be able to join the images on a personal computer using the same implementation that the terminal device uses. However, Ryosuke is silent on using the mobile communication terminal to send data over the internet with a server for character recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images (Abstract) for character recognition. Hideki also teaches using the internet with its mobile terminal device ([0015]) to send data to a server ([0012]).

Regarding claim 22, Hideki teaches the image processing network system according to claim 21, wherein the image processing terminal apparatus is a mobile phone connected with the Internet via a wireless public switched circuit (Drawing 1, [0012], and [0015]).

Regarding claim 23, Ryosuke et al. (Ryosuke) states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). Ryosuke also teaches the ability to output

information to an external personal computer ([0046]), however, Ryosuke is silent on teaching character recognition and using the external personal computer for character recognition and joining the image. The examiner takes into account that since the terminal device in Ryosuke does join the images using positional information it would be obvious to one of ordinary skill in the art to be able to join the images on a personal computer using the same implementation that the terminal device uses. However, Ryosuke is silent on using the mobile communication terminal to send data over the internet with a server for character recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images (Abstract) for character recognition. Hideki also teaches using the internet with its mobile terminal device ([0015]) to send data to a server ([0012]).

Regarding claim 24, Hideki teaches the image processing network system according to claim 23, wherein the image processing terminal apparatus is a mobile phone connected with the Internet via a wireless public switched circuit (Drawing 1, [0012], and [0015]).

Regarding claim 25, see rejections made to claims 1 and 2, as it addresses the rejections to the apparatus of this method.

Regarding claim 26, see rejection made to claim 3, as it addresses the rejection to the apparatus of this method.

Regarding claim 27, see rejection made to claim 4, as it addresses the rejection to the apparatus of this method.

Regarding claim 28, Ryosuke states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). However, Ryosuke is silent on using the mobile communication terminal for character

recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images (Abstract).

Regarding claim 29, Ryosuke teaches the method according to claim 28, further comprising: displaying the image data of the intended area on a display device of the terminal apparatus (Abstract and [0027]).

Regarding claim 30, Hideki teaches the method according to claim 28, further comprising: performing character recognition to the image data of the intended area with a character recognition device of the terminal apparatus (Abstract).

Regarding claim 31, Hideki teaches the method according to claim 30, further comprising: inputting a result of the character recognition to a cursor location of application software being operated on a computer connected with the terminal apparatus ([0032-0033]).

Regarding claim 32, Hideki teaches the method according to claim 30, further comprising: displaying a result of the character recognition on a display device of the terminal apparatus ([Claim 1]).

Regarding claim 33, Hideki teaches the method according to claim 32, further comprising: inputting confirmation of the result of the character recognition being displayed on the display device of the terminal apparatus ([0032-0033]).

Regarding claim 34, Hideki teaches the method according to claim 33, further comprising: inputting the result of the character recognition to a cursor location of application software being operated on a computer connected with the terminal apparatus ([0032-0033]).

Regarding claim 35, Ryosuke states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images (Abstract).

Regarding claim 36, Ryosuke states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). However, Ryosuke is silent on using the mobile communication terminal for character recognition. Hideki, does teach a portable terminal device for obtaining character information through a camera which takes pictures of static images where character recognition is done through a computer (Abstract).

Regarding claim 37, Hideki teaches the method according to claim 36, further comprising: displaying a result of the character recognition on a display device of the terminal apparatus ([Claim 1]).

Regarding claim 38, Hideki teaches the method according to claim 37, further comprising: inputting confirmation of the result of the character recognition being displayed on the display device of the terminal apparatus with the terminal apparatus ([0032-0033]).

Regarding claim 39, Hideki teaches the method according to claim 38, further comprising: inputting the result of the character recognition to a cursor location of application software being operated on the computer ([0032-0033]).

Regarding claim 40, Hideki teaches the method according to claim 28, further comprising: transmitting the image data of the intended area to a remote computer via a public switched network (Drawing 1, [0012], and [0015]).

Regarding claim 41, Hideki teaches the method according to claim 40, further comprising: processing the image data with the remote computer and transmitting a result of the processing to the terminal apparatus (Drawing 1 and Abstract).

Regarding claim 42, Hideki teaches the method according to claim 41, further comprising: displaying the result of the processing on a display device of the terminal apparatus ([Claim 1]).

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryosuke et al., JP 2003-087544, and Hideki, JP 2002-352190 as applied to claim 1 above, and further in view of Ono, 2003/0020814 A1.

Regarding claims 3 and 4, Ryosuke teaches a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Hideki teaches a portable terminal device, which has a camera to take pictures of images for character recognition (Abstract). Ono teaches an image capture device that has a combination of capturing devices having different light sensitivities, thus allowing for images of different resolutions ([0048-0049]). Also, the image capture device controls the light emission changing the

aperture size, which can also be used to change the direction of light emitted, based on the aperture or the position of the image capture device ([0035]). Therefore, combining the image capture device features of Ono to the camera in the portable terminal device in Hideki, would allow for capturing of different resolutions and changing direction and intensity of light, and thus increase accuracy of the image data taken to be processed. Thus, it would be clear to one of ordinary skill in the art to modify Ryosuke and Hideki at the time of the invention to include the capturing system of Ono.

5. Claims 8, 14, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryosuke et al., JP 2003-087544, and Hideki, JP 2002-352190, and further in view of Faulkerson, 4,804,949.

Regarding claims 8, 14, 18, and 20, Ryosuke et al. (Ryosuke) states a mobile communication terminal with a scanner (Abstract), which takes pictures of serial static images (Drawing 12), and calculates positional information (Abstract). Ryosuke teaches outputting image data together with the positional information to a personal computer ([0046]). Ryosuke teaches combining the partial images based upon the positional information calculated to create a composite image (Abstract). However Ryosuke and Hideki are silent on using their device to perform a pointing function on an external computer. Faulkerson teaches a hand-held device for image acquisition, which can also be used as a computer mouse for controlling the position of a cursor on a video display (Abstract). Therefore, it would be clear to one of ordinary skill in the art, to modify Ryosuke and Hideki to include a mode to perform a pointing function to the external computer at the time of the invention using their mobile communication terminal, with image acquisition for increased user interface.

Examiner's Note

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The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the examiner believed are the most relevant to the claimed subject matter. However, it is incumbent upon the applicant to analyze the prior art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate examiner's rationale of record. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vanchy Jr. whose telephone number is (571) 270-1193. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Michael J. Vanchy Jr.
Examiner
AU 2609
(571) 270-1193
Michael.Vanchy@uspto.gov


BRIAN WERNER
SUPERVISORY PATENT EXAMINER